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| 10/627,310 | 07/25/2003 | Cydney C. Brooks | ADY-009 | 1899 |
| 959 | 7590 | 11/04/2005 | EXAMINER | |
| LAHIVE & COCKFIELD, LLP. | | | MITRA, RITA | |
| 28 STATE STREET | | | ART UNIT | |
| BOSTON, MA 02109 | | | PAPER NUMBER | |

1653

DATE MAILED: 11/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/627,310

Applicant(s)

BROOKS, CYDNEY C.

Examiner

Rita Mitra

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 1-8 and 13-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Status of the Claims

Applicant's election with traverse of IX in the reply filed on September 19, 2005 is acknowledged. The traversal is on the ground(s) that Group X at least should be rejoined with Group IX because searches of the subject matter of Groups IX and X would be coextensive and there would be no undue burden on the Examiner to search the subject matter of the two groups. This is found persuasive. Accordingly, restriction between Groups IX and X is withdrawn. However, because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement with respect to the other Groups, the remaining election has been treated as an election without traverse (MPEP § 818.03(a)).

The requirement is still deemed proper and is therefore made FINAL.

Claims 1-8 and 13-26^{and} withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on September 19, 2005.

Therefore, claims 9-12 are currently under examination.

Objection to the Specification

Abstract is objected to because of the following informalities:

The abstract should include the steps in the methods of the invention.

The specification is objected to because the specification describes sequences that are set forth in the "Sequence Listing" and embedded in the text of the specification at pages 2, 31, Figure 3, however no reference is made to the sequence by use of the sequence identifier, preceded by "SEQ ID NO:" See 37 C.F.R. § 1.181(d). This objection may be overcome by providing sequence identifier to the embedded sequences.

Objection to the Claims

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Claims 9-12 are objected to because the claims describe a sequence that is set forth in the "Sequence Listing" and embedded in the text of the specification, however no reference is made to the sequence by use of the sequence identifier, preceded by "SEQ ID NO:." See 37 C.F.R. § 1.181(d). This objection may be overcome by providing sequence identifier to the claims.

Claim Rejections - 35 USC § 112, Second Paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

"The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention."

Claims 9-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 9-12 are indefinite because the abbreviation "FHOS" is not fully spelled out. It is unclear what "FHOS" is. The full spelled out words should precede an acronym/abbreviation.

Claim 12 is indefinite because of the use of the term "portion." It is not clear which portion of the amino acid sequence of FHOS protein, whether it is N-terminal or C-terminal. It is also not clear what is the position of that portion in relation to the amino acid sequence of full length FHOS protein.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Tojo et al. (US 2004/0072742 A1, published April 15, 2004, priority date December 20, 1999). The reference

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teaches a protein or a partial peptide and DNA encoding the same are useful as preventives/remedies for diseases. Tojo et al. also teaches a method of screening a compound that inhibits the binding of said protein and partial peptide to insulin responsive aminopeptidase (IRAP) or to glucose transporter 4 (GLUT4), wherein said compound is used as a preventive /remedy for diseases, e.g., hyperglycemia, diabetes mellitus (see abstract, paragraph 0031 at page 2, 0037 at page 3, 0197 at page 13, 0207 at page 14, 0221, 0224 at page 16, 0492 at page 33), wherein the test compounds are selected from peptides, proteins, non-peptide compounds, synthetic compounds, fermentation products, cell extracts, vegetable extract, animal tissue extracts and blood plasma (see 0226 at page 16, Examples 2, 9, 0493 at page 33). Tojo's protein II includes a human spleen derived protein containing the amino acid sequence of SEQ ID NO : 2, that is highly homologous (substitution of 9 amino acids in the total 1164 amino acids, that is 99.2% sequence identity) to FHOS protein described by Westendorf et al. (Gene, 232, 173-182, 1999, Genbank Accession NO AF113615). See Figures 6-11, 16, 0085 at page 5, SEQ ID NOs: 2 and 4, Examples 2, 9. Tojo's protein is having the structure of the claimed FHOS protein of instant application considered anticipating the binding of the claimed protein to IRAP or GLUT 4 (claims 9, 10, 11). The partial peptide of Tojo is considered for the portion of the FHOS protein of instant application (claim 12). Therefore, claims 9-12 of the instant application are being anticipated by Tojo et al.

Conclusions

No claims are allowed.

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita Mitra whose telephone number is 571-272-0954. The examiner can normally be reached on M-F, 10:00 am-7:00 pm.

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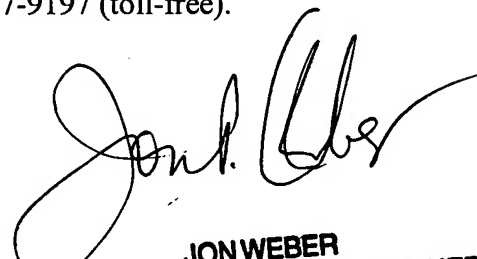
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Jon Weber can be reached on 571-272-0925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Rita Mitra, Ph.D.

October 26, 2005



JON WEBER
SUPERVISORY PATENT EXAMINER